

IN THE CLAIMS:

The pending claims are set forth below and have been amended and/or cancelled, without prejudice, where noted:

1-48. (Cancelled)

49. (New) A method for the preparation of a supported olefin polymerization catalyst comprising:

a) providing an accumulation of hollow polyethylene beads, wherein the hollow polyethylene beads are prepared by a supported catalyst component, wherein the support comprises porous polystyrene and the catalyst component is covalently bound to the support and is an ion based complex characterized by the general formula (I), wherein R' and R'' are the same and are phenyl groups substituted at the 2 and 6 position with isopropyl groups and R is an alkyl group having from 1-20 carbon atoms;

b) placing said polyethylene beads under a vacuum to dry said beads;

c) contacting said dried polyethylene beads with a solution of a olefin polymerization catalyst component to impregnate said beads with said catalyst component;

d) draining excess liquid from said accumulation of polyethylene beads; and

e) drying said accumulation of polyethylene beads under an inert gas atmosphere.

50. (New) A method for the preparation of a supported olefin polymerization catalyst comprising:

a) providing an accumulation of hollow polyethylene beads, wherein the hollow polyethylene beads are prepared by a supported catalyst component, wherein the support comprises porous polystyrene and the catalyst component is covalently bound to the support and is an ion based complex characterized by the general formula (I), wherein R' and R'' are the same and are phenyl groups substituted at the 2, 4 and 6 position with methyl groups and R is an alkyl group having from 1-20 carbon atoms;

b) placing said polyethylene beads under a vacuum to dry said beads;

c) contacting said dried polyethylene beads with a solution of a olefin polymerization catalyst component to impregnate said beads with said catalyst component;

d) draining excess liquid from said accumulation of polyethylene beads; and

e) drying said accumulation of polyethylene beads under an inert gas atmosphere.

51. (New) The method of claim 49 further comprising activating the supported catalyst component with an activating agent prior to supplying ethylene to a reaction zone containing said supported catalyst component.

52. (New) The method of claim 49, wherein said dried hollow beads are contacted with said catalyst solution for a period within the range of one half to about two hours.

53. (New) The method of claim 49, wherein the impregnation of said beads with said solution of olefin polymerization catalyst component is carried out under a vacuum followed by increasing the pressure on said accumulation of polyethylene beads prior to draining said excess liquid in subparagraph d).

54. (New) The method of claim 49, wherein said dry polyethylene beads are contacted with said solution of olefin polymerization catalyst at atmospheric pressure to provide a supported catalyst system in which said supported catalyst component is located predominantly on the surface of said hollow beads.

55. (New) The method of claim 49, wherein subsequent to the draining of said excess liquid from said hollow beads, said hollow beads are washed with a solvent for a period of time effective to remove said catalyst component from the surfaces of said beads to provide a supported catalyst system in which the supported catalyst component is predominantly located within the interior of said hollow beads.

56. (New) The method of claim 55, wherein said hollow beads are washed with said solvent for a period of time within the range of 20 seconds to 2 minutes.